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NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

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M.L. 281 (Monthly list of documents released by the NACA during August 1950)

Libraries in most of the important cities throughout the country, as well as libraries of schools, manufacturers, and other organizations dealing with aeronautics, are supplied copies of these publications for reference.

TECHNICAL NOTES

- TN 2133 Investigation of Separation of the Turbulent Boundary Layer.
By: G. B. Schubauer and P. S. Klebanoff.
- TN 2135 The Calculation of Downwash behind Wings of Arbitrary Plan Form at Supersonic Speeds.
By: John C. Martin.
- TN 2140 Theoretical Antisymmetric Span Loading for Wings of Arbitrary Plan Form at Subsonic Speeds.
By: John DeYoung.
- TN 2141 Charts for Estimating Downwash behind Rectangular, Trapezoidal, and Triangular Wings at Supersonic Speeds.
By: Rudolph C. Haefeli, Harold Mirels, and John L. Cummings.
- TN 2142 Photomicrographic Investigation of Spontaneous Freezing Temperatures of Supercooled Water Droplets.
By: Robert G. Dorsch and Paul T. Hacker.
- TN 2143 Analysis of the Effects of Boundary-Layer Control on the Power-Off Landing Performance Characteristics of a Liaison Type of Airplane.
By: Elmer A. Horton, Laurence K. Loftin, Jr., and Stanley F. Racisz.
- TN 2144 Effect of Chemical Reactivity of Lubricant Additives on Friction and Surface Welding at High Sliding Velocities.
By: Edmond E. Bisson, Max A. Swikert, and Robert L. Johnson.
- TN 2145 Lift-Cancellation Technique in Linearized Supersonic-Wing Theory.
By: Harold Mirels.
- TN 2146 On the Effect of Subsonic Trailing Edges on Damping in Roll and Pitch of Thin Sweptback Wings in a Supersonic Stream.
By: Herbert S. Ribner.
- TN 2147 Some Conical and Quasi-Conical Flows in Linearized Supersonic-Wing Theory.
By: Herbert S. Ribner.
- TN 2148 Laminar-Boundary-Layer Heat-Transfer Characteristics of a Body of Revolution with a Pressure Gradient at Supersonic Speeds.
By: William R. Wimbrow and Richard Scherrer.

- TN 2149 Investigation of Boundary-Layer Control to Improve the Lift and Drag Characteristics of the NACA 65₂-415 Airfoil Section with Double Slotted and Plain Flaps.
By: Elmer A. Horton, Stanley F. Racisz, and Nicholas J. Paradiso.
- TN 2150 Flight Investigation of the Effect of Transient Wing Response on Measured Accelerations of a Modern Transport Airplane in Rough Air.
By: C. C. Shufflebarger and Harry C. Mickleboro.
- TN 2153 The Stability of the Compression Cover of Box Beams Stiffened by Posts.
By: Paul Seide and Paul F. Barrett.
- TN 2154 An Analysis of the Autorotative Performance of a Helicopter Powered by Rotor-Tip Jet Units.
By: Alfred Gessow.
- TN 2155 Calculated Engine Performance and Airplane Range for Variety of Turbine-Propeller Engines.
By: Tibor F. Nagey and Cecil G. Martin.
- TN 2156 Theoretical Calculations of the Lateral Force and Yawing Moment due to Rolling at Supersonic Speeds for Sweptback Tapered Wings with Streamwise Tips. Supersonic Leading Edges.
By: Sidney M. Harmon and John C. Martin.
- TN 2157 Static and Impact Strengths of Riveted and Spot-Welded Beams of Alclad 14S-T6, Alclad 75S-T6, and Various Tempers of Alclad 24S Aluminum Alloy.
By: H. E. Grieshaber.
- TN 2158 A General Integral Form of the Boundary-Layer Equation for Incompressible Flow with an Application to the Calculation of the Separation Point of Turbulent Boundary Layers.
By: Neal Tetervin and Chia Chiao Lin.
- TN 2159 On the Particular Integrals of the Prandtl-Busemann Iteration Equations for the Flow of a Compressible Fluid.
By: Carl Kaplan.
- TN 2160 Measurements of Section Characteristics of a 45° Swept Wing Spanning a Rectangular Low-Speed Wind Tunnel as Affected by the Tunnel Walls.
By: Robert E. Dannenberg.
- TN 2161 Tables of Thermodynamic Functions for Analysis of Aircraft-Propulsion Systems.
By: Vearl N. Huff and Sanford Gordon.
- TN 2162 Investigation of Properties of Aisi Type 310B Alloy Sheet at High Temperatures.
By: E. E. Reynolds, J. W. Freeman, and A. E. White.
- TN 2163 Critical Stress of Plate Columns.
By: John C. Houbolt and Elbridge Z. Stowell.

- TN 2164 Axial-Momentum Theory for Propellers in Compressible Flow.
 By: Arthur W. Vogeley.
- TN 2165 Method of Analysis for Compressible Flow through Mixed-Flow Centrifugal
 Impellers of Arbitrary Design.
 By: Joseph T. Hamrick, Ambrose Ginsburg, and Walter M. Osborn.
- TN 2166 Effect of Heat and Power Extraction on Turbojet-Engine Performance.
 II - Effect of Compressor-Outlet Air Bleed for Specific Modes of Engine
 Operation.
 By: Frank E. Rom and Stanley L. Koutz.
- TN 2169 Wind-Tunnel Investigation at Low Speed of a 45° Sweptback Untapered Semispan
 Wing of Aspect Ratio 1.59 Equipped with Various 25-Percent-Chord Plain
 Flaps.
 By: Harold S. Johnson and John R. Hagerman.
- TN 2170 Effect of Initial Mixture Temperature on Flame Speeds and Blow-Off Limits of
 Propane - Air Flames.
 By: Gordon L. Dugger.
- TN 2172 Low-Speed Investigation of the Stalling of a Thin, Faired, Double-Wedge Airfoil
 with Nose Flap.
 By: Leonard M. Rose and John M. Altman.
- TN 2173 Density Fields around a Sphere at Mach Numbers 1.30 and 1.62.
 By: Paul B. Gooderum and George P. Wood.
- TN 2174 Comparison of the Experimental Pressure Distribution on an NACA 0012
 Profile at High Speeds with That Calculated by the Relaxation Method.
 By: James L. Amick.
- TN 2175 Effect of an Unswept Wing on the Contribution of Unswept-Tail Configurations
 to the Low-Speed Static- and Rolling-Stability Derivatives of a Midwing
 Airplane Model.
 By: William Letko and Donald R. Riley.
- TN 2176 An Analysis of the Normal Accelerations and Airspeeds of a Four-Engine
 Airplane Type in Postwar Commercial Transport Operations on Trans-
 Pacific and Caribbean - South American Routes.
 By: Thomas L. Coleman and Paul W. J. Schumacher.

REPORTS

- Rept. 927 Appreciation and Prediction of Flying Qualities.
 By: William H. Phillips.
 Formerly issued as TN 1670.
- Rept. 937 Constant-Pressure Combustion Charts Including Effects of Diluent Addition.
 By: L. Richard Turner and Donald Bogart.
 Formerly issued as TN 1086 and 1656.

- Rept. 938 Summary of Section Data on Trailing-Edge High-Lift Devices.
By: Jones F. Cahill.
Formerly issued as RM L8D09.
- Rept. 939 Theoretical Characteristics in Supersonic Flow of Two Types of Control Surfaces on Triangular Wings.
By: Warren A. Tucker and Robert L. Nelson.
Formerly issued as TN 1660, 1600, 1601.
- Rept. 943 A Simplified Method for the Determination and Analysis of the Neutral-Lateral-Oscillatory-Stability Boundary.
By: Leonard Sternfield and Ordway B. Gates, Jr.
Formerly issued as TN 1727.
- Rept. 947 The Development of Cambered Airfoil Sections Having Favorable Lift Characteristics at Supercritical Mach Numbers.
By: Donald J. Graham.
Formerly issued as TN 1771.
- Rept. 948 An Apparatus for Varying Effective Dihedral in Flight with Application to a Study of Tolerable Dihedral on a Conventional Fighter Airplane.
By: William M. Kauffman, Charles J. Liddell, Jr., Allan Smith, and Rudolph D. Van Dyke, Jr.
Formerly issued as TN 1788, 1936.
- Rept. 949 Effect of Screens in Wide-Angle Diffusers.
By: G. B. Schubauer and W. G. Spangenberg.
Formerly issued as TN 1610.
- Rept. 952 Direct Method of Design and Stress Analysis of Rotating Disks with Temperature Gradient.
By: S. S. Manson.
Formerly issued as TN 1957.

TECHNICAL MEMORANDUMS

- TM 1248 Investigations of Lateral Stability of a Glide Bomb Using Automatic Control Having No Time Lag.
By: E. W. Sponder.
- TM 1263 Contribution to the Problem of Buckling of Orthotropic Plates, with Special Reference to Plywood.
By: Wilhelm Thielemann.
- TM 1287 Dependence of the Elastic Strain Coefficient of Copper on the Pre-Treatment.
By: W. Kuntze.

